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Environmental Law and Justice in New York City, Where a Park is Not Just a Park

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Environmental Law and Justice in New York City, Where a Park is not Just a Park

CHRISTOPHER RIZZO*

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I. Introduction

“When is a Park not a Park? Maybe when it’s a battlefield, a highway, a waterworks, and, possibly, a water filtration plant.”1

New York City has known since the Croton Water System’s inception that filtration might one day be necessary.2 For years it also had a preferred site for the filtration plant, the Jerome Park Reservoir.3 When it became clear that chlorination would no longer be sufficient to maintain the safety of the water-supply, the City began planning for the inevitable filtration plant.4 Fierce and organized community opposition to a plant in that location signaled the start of what has been a tremendously difficult process.5 While the water supply continues to meet all health-based water quality standards, it violates aesthetic standards like color.6 Its increasing reliance on chlorination will present further difficulties when the State adopts rules limiting the use of such traditional drinking water disinfectants.7 Ever since the United States Environmental Protection Agency (EPA) and the New York State Department of Health (DOH) have demanded filtration, community opposition to hosting the plant has grown.8 As if to appease both groups, the government agencies and the community, the City is pursuing a dual track approach, siting the plant while studying filtration alternatives.9

Siting a filtration plant under these legal and community constraints is no small task. The site will require at least twenty

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1. Matthew Corey, Deja Vu All Over Again: City has Disrupted Park Many Times Before, NORWOOD NEWS, April 8-21, 1999, at F5.
2. See CROTON WATER SUPPLY SYSTEM EXTENDED SPECIAL STUDY PROGRAM REPORT, NEW YORK CITY DEP’T OF ENVTL. PROT. ES-1 (1997) [hereinafter CROTON SPECIAL REPORT].
5. See Critchell, supra note 3.
6. See N.Y. CITY DEP’T OF ENVTL. PROT., FINAL IMPACT STATEMENT FOR THE CROTON WATER TREATMENT PLANT, NOTICE OF COMPLETION [hereinafter CROTON PLANT FIS].
7. See id.
8. Two lawsuits have been filed to enjoin the construction of the filtration plant in Van Cortlandt Park in the Bronx. See infra notes 97-98 and accompanying text.
acres of open space proximate to the Croton Water Aqueduct.\textsuperscript{10} New York’s huge drinking water system serves over eight million people in New York City and its surrounding counties.\textsuperscript{11} There are nineteen reservoirs in the system which actually consists of the Catskill, Delaware and Croton Systems.\textsuperscript{12} The Croton System supplies ten percent of the water, a small but critical portion.\textsuperscript{13}

This article will analyze the political, environmental and legal issues involved in the siting of the filtration plant. While the article will discuss non-filtration alternatives, it is written largely under the presumption that filtration will have to be used at some point. Section II will discuss the background of the controversy, including the scientific, political and legal reasons that led to the conclusion that filtration was required. Section III will discuss the legal issues surrounding the City’s preferred site for the Filtration plant, the Mosholu Golf Course in Van Cortlandt Park. Section IV will present an overview of alternatives to filtration and, more importantly, to the current preferred construction site. Section V will conclude that the Park is an inappropriate site for the plant and that the process for selecting that location was legally insufficient.

II. Filtration Background

A. Legal Reasons for Filtration

The City is legally bound to study and plan for the construction of a major water treatment facility.\textsuperscript{14} Although the Croton Water Supply does meet most Safe Drinking Water Act (SDWA)\textsuperscript{15} primary standards and Surface Water Treatment Rule (SWTR)\textsuperscript{16} requirements for filtration avoidance, it fails an important one:

\begin{enumerate}
\item \textit{See} CROTON SPECIAL REPORT, \textit{supra} note 2, at 6-1.
\item \textit{See id.}
\item \textit{See id.}
\item New York City has entered into a consent decree with the Federal and State governments to filter its drinking water. This was in response to a suit brought against the City by those two parties. \textit{See} United States v. City of New York, 30 F. Supp. 2d at 326.
\item Safe Drinking Water Act (SDWA), 42 U.S.C. § 300g-3(b) (1994). The SDWA was created in 1974 to improve the quality of drinking water. When Congress felt that this goal was not met, it directed the EPA to enact a more stringent rule; the SWTR was created. \textit{See} United States v. City of New York, 30 F. Supp. 2d at 326 (discussing the history of the law and the subsequent regulation).
\item Surface Water Treatment Rule, 40 C.F.R. § 141.70 (2000).
\end{enumerate}
watershed development control.\textsuperscript{17} The SWTR was enacted pursuant to the authority given to the EPA under the SDWA.\textsuperscript{18} The EPA's administrator is given the authority to "promulgate a national primary drinking water regulation that requires the use of a treatment technique in lieu of establishing a maximum contaminant level."\textsuperscript{19} In 1989, the EPA used its authority and promulgated the SWTR, which required filtration unless certain criteria were met.\textsuperscript{20} New York State also developed its own regulation that set filtration as the minimum treatment for surface drinking water systems.\textsuperscript{21} Both the EPA and the State of New York have determined that the water supply must be filtered.

New York City also recognized the need for filtration on its own. In 1991, the City released a report detailing the need for filtration.\textsuperscript{22} In fact, believing that the Croton Watershed had deteriorated beyond redemption, the City failed to apply for a filtration waiver under the SDWA.\textsuperscript{23}

Filtration is required when the agency with the primary responsibility for enforcing the SDWA determines that it is necessary, or where the public water system has failed to comply with the SWTR.\textsuperscript{24} The DOH determined in 1992 that filtration was required and the City entered into a consent agreement to that effect.\textsuperscript{25} The EPA, despite ceding the initial authority to enforce the SWTR and SWDA to the states, retains enforcement authority as well.\textsuperscript{26} For several years, the EPA also has argued for filtration in the Croton Watershed.\textsuperscript{27} It notes that no watershed as densely populated as the Croton Watershed has successfully avoided fil-

\begin{itemize}
\item \textsuperscript{17} See Croton Special Report, supra note 2, at 2-3.
\item \textsuperscript{19} Id.
\item \textsuperscript{20} See Filtration and Disinfection, 40 C.F.R. § 141.71 (1989).
\item \textsuperscript{21} The state law says: "Minimum treatment for surface water sources or ground water sources directly influenced by surface water shall be filtration and disinfection techniques, approved by the State in accordance. . . ." N.Y. State Sanitary Code § 5-1.30(b) (McKinney 1989).
\item \textsuperscript{22} See United States v. City of New York, 30 F. Supp. 2d at 326-327 (discussing N.Y. City's 1991 report entitled "New York City's Long-Range Water Quality, Watershed Protection and Filtration Avoidance Program").
\item \textsuperscript{23} See Croton Special Report, supra note 2, at 2-4.
\item \textsuperscript{24} See United States v. City of New York, 30 F. Supp. 2d at 326.
\item \textsuperscript{25} See id.
\item \textsuperscript{26} The United States can still sue to enforce the standards. See 42 U.S.C. § 300(g)-3(b) (1994).
\item \textsuperscript{27} The consent decree in which the City agreed to filtration was based upon the EPA's 1993 determination that filtration was required under 1989's SWTR. See generally United States v. City of New York, 30 F. Supp. 2d at 327.
\end{itemize}
tration before. Only six percent of the 140 public water systems serving populations of greater than 100,000 people have successfully had filtration waived. The Agency considers twenty percent public ownership in a watershed as optimal for its protection. In the Croton Watershed, only eleven percent of the land is protected. New York City owns 19,800 of the 212,550 acres in the Watershed, 9,000 of which includes the reservoir surfaces. While this twenty-five percent public ownership is merely a guiding principle for the EPA, it reflects the challenges New York City faced in considering the non-filtration possibility.

Compounding the stringent guidelines of the EPA is the cost of land in the Croton Watershed; one to two billion dollars to achieve a twenty-five percent ownership rate. Given this background, it is not surprising that the EPA exercised its authority with a 1993 determination that the System had to be filtered.

Despite its earlier recognition of the importance of filtration, New York City delayed implementing a filtration plan. As a result, the New York State Department of Health cited the City with a "Failure to Filter" violation. Therefore, when the EPA sued the City, the New York State DOH joined the suit alleging violations of the State Sanitary Code.

The ensuing legal action was settled by consent decree. The United States District Court for the Eastern District of New York approved the consent decree requested in the action brought by the United States and New York State. While it ended the litigation, it left the difficult siting question to the City. The court

29. See Croton Special Report, supra note 2, at 2-35.
30. See Croton Special Report, supra note 2, at 2-35.
31. See Croton Special Report, supra note 2, at 2-35.
32. See Croton Special Report, supra note 2, at 2-35.
33. See Croton Special Report, supra note 2, at 2-35.
34. See Croton Special Report, supra note 2, at 2-35.
35. See United States v. City of New York, 30 F. Supp. 2d at 326.
36. See Corey, supra note 1.
39. The Consent Decree requires New York City to comply with the Safe Drinking Water Act, the Surface Water Treatment Rule, and the State Sanitary Code by building a filtration plant. See United States v. City of New York, 30 F. Supp. 2d at 327.
40. See id.
stated, "this litigation seeks only to enforce the filtration determination, and the consent does not itself determine the location of the filtration plant but recognizes that the siting decision will be made by the City of New York."\footnote{Id. at 329.}

The Consent Decree required the City to obtain all requisite state approvals in siting and developing a plant.\footnote{See Verified Complaint and Article 78 Petition, Friends of Van Cortlandt Park and The Parks Council, Inc. v. City of New York, 95 F. Supp. 2d 195 (E.D.N.Y. 1999) (CV99-7399).} The filtration plant must be completed by September 9, 2006.\footnote{See United States v. City of New York, 30 F. Supp. 2d at 327.} As previously noted, the City is pursuing a dual track approach to watershed protection, siting a plant while studying alternatives to filtration. To obtain filtration avoidance, the City must comply with numerous federal and state standards.\footnote{See \textit{CROTON SPECIAL REPORT}, supra note 2, at 2-4 through 2-8. The water must comply with SDWA, Safe Drinking Water color standards, the SWTR, total coliform rules, and total tri-halo pentamethane rules.} This is a daunting task especially considering the comparatively pristine nature of the systems that have qualified for filtration avoidance.\footnote{See infra notes 49-52 and accompanying text. Filtration avoidance under New York State's Sanitary Code, section 5-1.30, requires (1) conformance with fecal coliform standards, (2) low turbidity levels, (3) effective disinfection, (4) low residual chlorine levels, (5) a watershed control program against contamination, (6) no disease out-breaks since 1980, (7) and low amount of residual chemicals.}

The Catskill/Delaware Systems of the City's water supply were granted filtration avoidance.\footnote{See \textit{CROTON SPECIAL REPORT}, supra note 2, at 2-36.} The reservoirs are far more protected than the Croton System's, with as much as twenty-six percent of the land in this watershed publicly owned.\footnote{See Edward J. Messina, \textit{Filtration Avoidance Under the Safe Drinking Water Act}, 19 \textit{Vt. L. Rev.} 557, 582 (1999).} Having to filter this water supply would have had a tremendous impact on New York City's budget, costing the City billions of dollars to construct such a plant.\footnote{See United States v. Mass. Water Res. Auth., 48 F. Supp. 2d 65, 66 (D. Mass. 1999).}

The experience of other urban water supplies suggests that the Croton System cannot avoid the filtration mandate. Boston's drinking supply, provided by the Massachusetts Water Resources Authority (MWRA), became the subject of a lawsuit mandating filtration for the Wachusett Reservoir.\footnote{See United States v. Mass. Water Res. Auth., 48 F. Supp. 2d 65, 66 (D. Mass. 1999).} The EPA sought a court
order to force the MWRA to filter its Wachusett water. Boston's other drinking water source, the Quabbin Reservoir, is one of the other few sources in the nation granted filtration avoidance. In the Quabbin Reservoir Watershed, sixty-five percent of the land is protected from development. Even the Wachusett Reservoir, the former subject of contentious litigation over filtration, is surrounded by thirty-two percent protected open space. While the court recently granted at least a temporary filtration avoidance, it was done only after Boston established an aggressive campaign to protect watershed land and implement other disinfection mechanisms.

B. Scientific Issues in Deciding to Filter the Drinking Water

The SDWA was amended in 1996 due to growing concerns about bacteria, Cryptosporidium and Giardia, viruses and other contaminants in drinking water. Concerns about drinking water were heightened with the 1993 Cryptosporidium outbreak in Milwaukee. Even with the City's filtration system, the microscopic parasites entered the drinking water, and the City became the target of a massive class action lawsuit. An estimated


51. See Croton Special Report, supra note 2, at 2-35.

52. See Croton Special Report, supra note 2, at 2-36.

53. See Croton Special Report, supra note 2, at 2-36.

54. The court would not give in to the EPA filtration request, saying, "[t]he story of Wachusett water quality in the last decade has been one of continuing improvement, in some respects gradual, in others dramatic, as MWRA management has sought to renovate the MWRA's system to avoid filtration." United States v. Mass. Water Res. Auth., 97 F. Supp. 2d 155, 187 (D. Mass. 2000).


57. See id. at 33.


403,000 people were sickened with gastrointestinal illnesses in that disaster.60

Both the Cryptosporidium and the Giardia parasites are detected in low levels in New York City's drinking water.61 They are insidious organisms, resistant to traditional safe-guards. Cryptosporidium's hard outer wall makes it especially hard to kill with traditional disinfectants, such as chlorine.62 The larger Giardia can be filtered effectively in comparison with microscopic Cryptosporidium, which often passes through filtration systems.63 In addition to these specific concerns the Croton Reservoirs suffer from eutrophication, anoxia and an excess of organic matter in the water.64

Continued use of chlorine and other disinfectants to avoid filtration is also disfavored because of the chemical's effect on humans. Chlorine was once considered a cure-all, allowing cities to avoid filtration plants.65 Today, while still used extensively, it is considered a possible carcinogen, alleged to cause as many as 10,700 cases of bladder and rectal cancer a year.66 Chlorine once allowed cities to avoid building costly filtration plants by effectively disinfecting drinking water. Today the opposite is true, filtration is seen as a healthier alternative to the over-use of chlorine.67

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60. See MacKenzie, supra note 58.
61. See N.Y. City Dep't of Envtl. Prot., Cryptosporidium and Giardia Background Information and Monitoring Program, http://www.ci.nyc.ny.us/html/dep/html/pathogen.html (last modified Feb. 8, 2001). The DEP also acknowledges its deficiencies in ability to test for these parasites. When found it is often hard to know if they are dead or alive. See id.
62. See Patricia Kocagil et al., The Value of Preventing Cryptosporidium Contamination, 9 RISK, 175, 176 (1998).
63. See id. at 181.
64. See Croton Special Report, supra note 2, at 2-3. Eutrophication results from phosphorous and nitrogen from Sewage Treatment Plants causing excessive plant and algal growth in the reservoirs. Anoxia is a lack of oxygen due in part to excess nutrient loading. This condition can cause minerals like iron to be released into the water, affecting color. Elevated Total Organic Carbon (TOC) is caused by the decay of excess plant matter. See Croton Special Report, supra note 2, at 2-3.
65. See Croton Plant FIS, supra note 6, at 3.
67. Rutland, Vermont was able to drastically reduce chlorine usage by its adoption of a slow sand filtration process. This system filtered out Giardia cysts and Cryptosporidium oocysts. See Slow Sand Filtration Facility Helps Lower Costs, AM. CITY & COUNTY, March 1997, at 43.
Finally, the Croton Water System serves as an essential component of the city's water supply during droughts. The shortfall for drinking water in 2045 is predicted to be 184 million gallons a day (mgd), but that prediction jumps to 398 mgd without the Croton water supply.\(^{68}\) Drought emergencies would increase from once every ten years to once every five years.\(^ {69}\) The Chelsea Pumping Station, drawing on less pristine Hudson River water, would have to compensate.\(^ {70}\) If a drought as severe as the one experienced in the 1960s occurred, the City could foreseeably run out of water.\(^ {71}\)

C. Plant Design: Addressing the Legal and Scientific Issues

To comply with the legal requirements, and to solve the health threats, the City has designed a filtration plant that incorporates both chemical and physical treatment of the water.\(^ {72}\) The design calls for a capacity of 290 (mgd),\(^ {73}\) an amount still inadequate to solve the projected 2045 water shortfall.\(^ {74}\) In addition to this water treatment plant, the City must site a raw water pumping station, a twenty million gallon treated water reservoir, and a finished water pumping station.\(^ {75}\) This paper is primarily concerned with the largest of the facilities, the Water Treatment Plant (Filtration Plant).

The filtration method chosen will specifically target the scientific concerns addressed above. It will reduce the amount of chlorine that must be used, incorporating other chemical treatments.\(^ {76}\) Also part of the proposed plan will be the use of ozone, a disinfectant that will hopefully address the Cryptosporidium issue. Aeration facilities will be installed at the

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68. See CROTON SPECIAL REPORT, supra note 2, at ES-2.
69. See CROTON SPECIAL REPORT, supra note 2, at ES-3.
70. See CROTON SPECIAL REPORT, supra note 2, at ES-3.
71. See CROTON PLANT FIS, supra note 6, at 27.
72. See CROTON SPECIAL REPORT, supra note 2, at ES-7.
73. See CROTON PLANT FIS, supra note 6, at 1.
74. See United States v. City of New York, 30 F. Supp. 2d at 327.
75. The raw water pumping station brings drinking water from the reservoirs to the filtration plant. The finished water reservoir stores treated water. The finished water pumping station sends the water to the consumers. See CROTON PLANT FIS, supra note 6, at 10.
76. Among them, alum (aluminum sulfate), coagulants, sodium bisulfate, sodium hypochlorite, hydro fluosilicic acid, sodium hydroxide, and ortho-phosphate. See N.Y. CITY DEPT’OF ENVTL. PROT., CONCEPTUAL DESIGNS FOR THE CROTON WATER TREATMENT PLANT 2-15 (1998) [hereinafter TREATMENT PLANT CONCEPTUAL DESIGN].
New Croton Reservoir. The latter will require the installation of pumps in the reservoirs to address the anoxic conditions that lead to violations of the State’s drinking water color standards.

Preliminary designs for the plant have attempted to mitigate the impacts on whatever community is chosen, especially if it is sited in a park. Despite efforts to build as much of the plant as possible underground, it will still rise thirty feet above grade at the Van Cortlandt Park site. The New York City Department of Environmental Protection insists, however, that there will be “no significant adverse impacts, all [park] facilities will be replaced and enhanced.” It expects no releases of ozone gas nor odors to the surrounding community.

III. The Legality of Siting a Filtration Plant in a Park

There are three legal issues involved in siting the Filtration Plant in Van Cortlandt Park. The first is whether the doctrine of alienation of parkland is violated by building a large filtration plant in land held for the public trust. The second issue is whether the city has violated its own Zoning Resolution by not zoning the Park to permit such an industrial use. Finally, the Environmental Impact Statement has been criticized for failing to adequately address the effects this plant will have on the Park and the community. This discussion inevitably invokes the doctrine of environmental justice.

77. See id. at 2-11.
78. See CROTON SPECIAL REPORT, supra note 2, at 2-3.
79. See CROTON PLANT FIS, supra note 6, at 9.
80. See CROTON PLANT FIS, supra note 6, at 19.
81. CROTON PLANT FIS, supra note 6, at 31.
82. See N.Y. CITY DEP’T OF ENVTL. PROT., RESPONSE TO COMMENTS ON THE DRAFT SCOPE WORK FOR THE PRELIMINARY DRAFT ENVIRONMENTAL IMPACT STATEMENT, CROTON WATER TREATMENT PLANT PROJECT 85 (1998) [hereinafter RESPONSE TO COMMENTS].
83. Land is held in trust for the public. See Williams v. Gallatin, 128 N.E. 121, 122 (N.Y. 1920).
84. See NEW YORK, N.Y., ZONING RESOLUTION § 11-13 (1974). A zoning amendment is required before land is removed from the control of the Department of Parks and Recreation.
86. Environmental Justice is the doctrine of eliminating unfair concentrations of polluting and undesirable facilities in certain communities. See discussion infra section IV.
A. Overview of the Site Chosen

There is no small irony in the fact that the park chosen, Van Cortlandt Park in the northern corner of New York City, has been sacrificed before for the Croton Water System. In the 1830s and 1880s the City was forced to purchase strips of land from the Van Cortlandt family to make way for the underground Croton Aqueduct. The historic property, today covering over 1100 acres, was purchased pursuant to New York State Law in 1888. Four years earlier, the New York State Assembly and Senate had authorized the creation of the park. Throughout its over one hundred year existence the park has seen three highways, a railway, and one water tunnel shaft driven through it.

The City offered three reasons for choosing the Mosholu Golf Course, in Van Cortlandt, as its site for the filtration. First, the site has the least potential for significant impacts. Second, construction could be done substantially below grade. Third, the site was deemed consistent with the doctrine of environmental justice, evaluated under the City’s fair share analysis.

B. Alienation of Parkland

Public lands and parks are to be held in trust for the public. Alienation, removal of the land from active park use, is not per-
mitted without legislative approval. Relying on this long-held doctrine, two community groups sued the city to halt the filtration plant's construction in the park. In both *Friends of Van Cortlandt Park and Parks Council, Inc. v. City of New York* and *Norwood Community Action v. Dept. of Environmental Protection*, the plaintiffs petitioned that the city be enjoined from proceeding with its plans until the matter is brought before the legislature. The *Friends* suit focuses on the General City Law of New York State, which prohibits alienation of parkland without legislative approval. The *Norwood* suit notes the case law which has long upheld the rule against alienation of parkland. The Federal Court has rejected both suits, deciding in favor of the City, and the community groups have appealed.

Alienation's most extreme and prohibited form is the sale of land from a municipality to a private party. In *Aldrich v. City of New York*, the New York Supreme Court stated that "the legislative authority to enable a municipality to sell its public parks must be plain." In that case, the city had set aside 262 acres for public parkland. Adjacent were 14.4 acres which, while also designated as parkland, were leased to a hospital to develop and use privately. When the land reverted to the City, it sought to sell it. The court held that regardless of the previous use of the land for a hospital, it was parkland and could not be sold.

This rule does not apply when the land is purchased for general municipal purposes as established in *Pearlman v. Ander-

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103. *Id.* at 742.
104. *See id.* at 735.
105. *See id.* at 735.
106. *See id.* at 736.
In that case the New York Supreme Court specifically distinguished property purchased by cities for parkland from that bought for general "municipal purposes." This exception will not apply in the present case because the land was acquired for the express purpose of creating a public park. A second exception to the rule is when land has already been alienated. In *Tuck v. Hucksher*, the New York Supreme Court upheld a decision to allow the Metropolitan Museum of Art to expand onto property that had already been alienated for museum purposes, even if it had never been so used before.

The rule of alienation applies to more than just the egregious example of the sale of a park to a private entity. No public uses other than park purposes are permitted in a park. The New York Court of Appeals stated in *Williams v. Gallatin* that "no objects however worthy, such as courthouses and school houses, which have no connection to park purposes, should be permitted without legislative authority plainly conferred." In *Gallatin*, the Safety Institute of America sought to locate its office building in Central Park. The Court began to set out the test to determine what is a public park use: the requested use must serve the same public good that the park purpose did.

Another way to state the test to determine that a use is non-alienating is that "the facility concerned offers substantial satisfaction to the public which would only be possible in a park setting." For example, a restaurant, under the above test, would not be an alienating use, even though it would not attract the same people that a park would. A comfort station would also be considered a non-alienating use for the reasons stated above.

109. *Id.* at 1015.
110. *See* 1884 N.Y. Laws 522 ("An Act Laying Out Public Places and Parks. . ."). This statute states: "all of the these descriptions of said park and parkways. . .through the Department of Public Parks and Hereby authorized and directed to take said pieces of land for public use as and for public parks." *Id.* § 2.
113. *Id.*
114. *See id.* at 121.
115. *See id.* at 123.
117. *See id.*
Conversely, under the above test, a school would not be considered a permissible park use. In evaluating the use of parkland for a school, the court said that a municipality, in discontinuing its park "without legislative approval is an unauthorized violation of the sanctity of this long recognized public trust." It does not conform to the test explained above.

The rule of alienation is less absolutely applied to temporary alienations of parkland, depending on the nature of the proposed use. A mere license to operate a park concession, such as a driving range, is not violative of the rule against alienation. Courts distinguish mere licenses from permanent conveyances or leases. This was especially true in *Huestis v. County of Nassau*, where the license for a refreshment stand was revocable with only ten days notice. Clearly, the Nassau County Parks Department had not ceded control of the park.

When the park use, albeit temporary, is not a public use, it is impermissible. In *Tobin v. Hennessy*, the New York City Parks Department had been issuing licenses to people to maintain summer bungalows in Pelham Bay Park in the Bronx. Finding that the use was not a public one, even if temporary, the court invalidated the power of the Parks Department to issue such licenses. The court rejected the claim that the use was not permanent, calling the arrangement a "subterfuge of temporary permits to circumvent the law."

Applying even temporary non-park uses to the rule of park alienation, the court struck down numerous alienation attempts. The use of a New York City Park for storing trucks by the Department of Sanitation was enjoined. The term of fourteen years was not considered so short as to be negligible. Similarly, the

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120. Id.
121. See 795 Fifth Ave. Corp., 242 N.Y.S.2d at 969.
122. See Huestis v. County of Nassau, 244 N.Y.S.2d 165, 168 (Nassau County Sup. Ct. 1963).
123. See id. at 167. The Supreme Court of Nassau County says, quoting Feder v. Caliguira, 171 N.E.2d 316, 318 (N.Y. 1960), "it is the transfer of absolute control and possession of property at an agreed rental which differentiates a lease from other arrangements dealing with property rights." Id.
124. See Huestis, 244 N.Y.S.2d at 167.
126. See id. at 620.
127. Id.
128. See Ackerman v. Steisel, 480 N.Y.S.2d 556, 557 (2d Dep't 1984).
129. See id. at 558.
court has gone on to invalidate other attempts to divert parks for temporary or quasi-public uses. The cases have included golf courses\(^{130}\) and land-fills to later be used as ski-slopes.\(^{131}\)

The current site proposed by New York City for the filtration plant is best evaluated under both the permanent and temporary alienation analyses. Community activists in their suits against the city call the filtration plant a permanent diversion from park uses.\(^{132}\) The classic permanent non-park use is a school.\(^{133}\) While certainly a necessary and important public building, it simply does not belong in a park. A restaurant, however, dedicated and open to the public, would be permitted.\(^{134}\) Certainly an eleven acre filtration plant, if considered permanent, would be considered a more extreme park use than a school. Therefore, under a permanent use analysis the Croton Filtration Plant would have to be subject to legislative approval.

The City's Department of Environmental Protection (DEP) called the disruption of the park temporary and the Federal Court has agreed.\(^{135}\) The DEP has stated repeatedly that the impact would be temporary and, therefore, not subject to a State Legislature alienation proceeding.\(^{136}\) It points to its plans to fully mitigate the destruction of the golf course.\(^{137}\) It has pledged at least $41 million to replace and upgrade the golf-course and surrounding facilities, arguably to restore the disturbed acres to park-like

\(^{130}\). See Miller v. City of New York, 203 N.E.2d 478.


\(^{133}\). See Sierra Club v. Bd. of Educ. of City of Buffalo, 512 N.Y.S.2d 954.

\(^{134}\). See 795 Fifth Ave. Corp. v. City of New York, 242 N.Y.S.2d at 969.


\(^{136}\). The DEP's commissioner Joel A. Miele Sr. stated that "revisions to our proposal made during the review process incorporate additional community enhancements that further ensure the site's recreational and open spaces will not only be preserved but significantly enhanced." Press Release, N.Y. City Dep't of Envtl. Prot., Site for Croton Water Filtration Facilities Approved (July 21, 1999) [hereinafter DEP Press Release] (on file with author). The Department of Environmental Protection has not only refused to see the use as anything but a permissible temporary use, but has not acceded to Public Requests to justify this decision. See Jordan Moss, Filtration Plan Gets the Final Go-Ahead, NORWOOD NEWS, July 29-August 11, 1991, at 1.

\(^{137}\). See Jordan Moss, City Needs Legislature's Approval, Dinowitz Says, NORWOOD NEWS, April 8-21, 1995, at F5.
The above case-law requires, however, that the filtration plant be approved by the State Legislature.\textsuperscript{138} Regardless of these restoration plans, the park would be removed from public use for at least five years and possibly more.\textsuperscript{139} Although the use in Ackerman \textit{v.} Steisel lasted for at least fourteen years, it was for parking, a far more benign use.\textsuperscript{140} While the current proposed use would be of a shorter duration, it would be of a far more significant nature. The State Attorney General of New York agrees and has stated publicly that the plan will need to be presented to the State Legislature.\textsuperscript{142} Some members of the City Council agreed, but the measure ultimately passed there, paving the way for the two current lawsuits based on park alienation as well as the numerous criticisms from city officials.\textsuperscript{143}

Finally, the Federal Court's discussion of the alienation incorrectly relied upon the public nature of the facility and an inapplicable case, \textit{Wigand v. City of New York}.\textsuperscript{144} The case law outlined above makes no distinction between public and private non-park uses. As the court in Gallatin points out, public facilities that are not related to park uses should not be permitted to encroach on park purposes without express legislative authority.\textsuperscript{145} The \textit{Wigand} case also does not support the use of underground parkland without the proper alienation proceedings in the state legis-

\begin{footnotesize}
\begin{tabular}{ll}
139. & The City points to two cases as support for other underground uses of parkland made without state approval. These cases are inapposite. For example in Wetter \textit{v. Moses}, Battery Park in Manhattan was closed for highway construction. \textit{See Wetter v. Moses}, 86 N.Y.S.2d 110 (N.Y. County Sup. Ct. 1941). The issue of park alienation, however, was not raised by the plaintiffs. In \textit{Wigand v. City of New York} the use of Silver Lake Park for construction of underground storage tanks was in fact approved by the state. \textit{See Wigand v. City of New York}, N.Y.L.J., Sept. 25, 1967 at 21 (Richmond Co. Sup. Ct. Sept. 25, 1967). The State Water Resources Commission approved this use, and this government body was empowered by the state to deal with the City's water issues. \textit{See} State of New York's Memorandum of Law Pursuant to Paragraph of the Consent Decree, CV 97-2154 (E.D.N.Y. 1999). \\
140. & \textit{See} DEP Press Release, \textit{supra} note 136. \\
141. & \textit{See} Ackerman \textit{v. Steisel}, 480 N.Y.S.2d at 557. \\
142. & \textit{See} Critchell, \textit{supra} note 3, at 3. \\
144. & \textit{See} United States \textit{v. City of New York}, 96 F. Supp. 2d 195 at 202-204. \\
145. & This case refers to such public facilities as schools and courthouses. \textit{See} Williams \textit{v. Gallatin}, 128 N.E. at 122.
\end{tabular}
\end{footnotesize}
lature. The *Wigand* case also does not support the use of underground parkland without the proper alienation proceedings in the state legislature because in that case the State Water Resources Commission had approved the project already. Thus, the vast body of case law demonstrates that the state legislature has had to approve the underground use of parkland for utility lines, subways, and aqueducts.

C. Compliance with New York City's Zoning Resolution

When parkland is removed from the control of the New York City Department of Parks and Recreation, a zoning resolution must be passed. Specifically section 11-13 of the New York City Zoning Resolution states that when parkland is "sold, transferred, exchanged, or in any manner relinquished from the Parks Department" a zoning amendment must be passed. The City Council’s Land Use Committee overlooked this issue and passed the measure anyway. The court dismissed this issue as well, reasoning that since the facility was going to be used by the City, albeit another City agency, the zoning amendment was not required. The law cited above, however, clearly contemplates removal of control from the Parks Department, not the City of New York generally.

The issue is, as it was with alienation, whether the project will permanently or temporarily remove the parcel of parkland from the control of the Parks Department. The City's argument is that the plant will be covered with earth and returned to normal park use, experiencing only a temporary removal from the control of the Parks Department. In other words, there will be no net

149. Id.
152. See Press Release, New York City Dep't Of Envtl. Prot., Site for Croton Water Filtration Facilities Approved (July 21, 1999) (on file with author). See also Telephone interview with Paula Kaplan, Bronx Borough President's Office (Jan. 4, 2000), during which Kaplan suggested that this is the rationale behind the City's failure to seek an amendment to the zoning resolution as part of its Uniform Land Use Review Procedure (ULURP). The ULURP rules are contained in the City's Charter. NEW YORK, N.Y., CITY CHARTER § 197-c.
loss of parkland to require an alienation proceeding at the legisla-
tive level nor a zoning amendment at the municipal level.

New York City argues that no portion of the public park will
be permanently removed from the control of the Parks Depart-
ment. Certainly the proposed parking lot will permanently re-
move a portion of the park from both the people and the control of
the Parks Department. Recall that in Ackerman v. Steisel the
court held that the use of parkland for a parking lot was an illegal
alienation of parkland. The larger issue, however, is the filtra-
tion plant itself. A large area underneath the ground will be
under the control of the Department of Environmental Protection.
There is no precedent for allowing this in city parks.

A park is not comprised solely of its surface area. Van Cor-
tlandt Park is more than a playground. It is a huge natural area
that exists for human pleasure and as a natural preserve. Taking
away such a huge area under its surface and, indeed, altering its
surface, takes a significant portion of the park out of the Parks
Department's control. As one of the suits against the city appro-
priately explains: "Thus instead of acres of sloping, tree-lined
parkland, there will be a flat, treeless expanse of a thirty-five foot
high plateau floating on top of an active industrial plant engaged
in removing sludge from the City's water supply." When the
park is viewed not merely as its numerical surface area but as a
system of trees, fauna, hills, fields, ground and surface waters,
and recreational facilities there is a net loss of control for the
Parks Department as well as an alienation of parkland. This loss
will be permanent.

Property ownership generally extends above and below the
surface of the land. This is demonstrated by the fact that rights
to minerals and water below the surface can be sold independently
of the rights to the surface. Owners of property typically have

154. The city has constructed a large facility related to its "Third" water tunnel in
Van Cortlandt Park. On the surface it comprises only an ill-kept bunker and a sandy
parking lot. Underground, a huge facility of pipes, offices, shut-off valves, and eleva-
tor shafts exist. Personal site visit, 1995. Furthermore, this water tunnel was ap-
proved by the New York State Water Resources Commission. See State of New York's
Reply Affirmation at 4, United States v. City of New York, 96 F. Supp. 2d 195
155. Verified Complaint and Article 78 Petition at 15, Friends of Van Cortlandt
Park and The Parks Council, Inc. v. City of New York, 95 F. Supp. 2d 195 (E.D.N.Y.
156. See 1 Am. Jur. 2d Adjoining Landowner § 82 (1994).
157. See id.
the right to have their land, above and below the surface, remain in its natural state.\textsuperscript{158} Even airspace over the property is owned, to the extent that it has useful value.\textsuperscript{159}

By analogy these rules apply to parkland. Parkland is a unique ownership arrangement where the land is in trust for the public.\textsuperscript{160} Case law, in discussing what can be built in parks, makes no distinction between what can go on the surface or below. The court in \textit{Williams v. Gallatin} demonstrates this, stating that "no objects, however worthy, such as courthouses and schoolhouses, which have no connection with park purposes should be permitted to encroach upon it without legislative authority plainly conferred."\textsuperscript{161} The word "encroach" makes no distinction between surface and below the surface. Additionally, when village halls,\textsuperscript{162} schools\textsuperscript{163} and landfills\textsuperscript{164} are barred from parks it seems absurd to frustrate the courts' intent simply by covering the "encroachments" with a thin layer of soil.

The extension of the rule of private property to parkland\textsuperscript{165} is further supported by the state's general policy towards mining in parklands. In \textit{Watters v. People} the court stated that New York State legislative approval was required before the subsurface of parkland could be expropriated for mining.\textsuperscript{166} This makes it clear that the subsurface is an integral part of the park. To define a park simply by its surface area would permit municipalities to frustrate a century of park alienation law and radically alter the natural beauty of parkland. It is an inaccurate statement of law to say that the subsurface of a park can be developed and removed from the New York City Department of Parks and Recreation's control. An amendment to the City Zoning Resolution and alienation proceedings in the state legislature are required.

\begin{itemize}
\item [158.] \textit{See id.}
\item [159.] \textit{See 8A Am. Jur. 2d Aviation} § 3 (1997).
\item [160.] \textit{See Miller v. City of New York}, 203 N.E.2d at 480.
\item [161.] \textit{See 128 N.E. at 122.}
\item [162.] \textit{See Pearlman v. Anderson}, 307 N.Y.S.2d at 1017.
\item [163.] \textit{See Williams v. Gallatin}, 128 N.E at 122.
\item [164.] \textit{See Stephenson v. County of Monroe}, 351 N.Y.S.2d at 233.
\item [165.] The rule that the landowner controls the surface as well as above and below it.
\item [166.] \textit{See Watters v. People}, 195 N.Y.S.2d 785, 789 (Cattaraugus County Sup. Ct. 1960).
\end{itemize}
D. Environmental Justice: Inadequacy of the Environmental Impact Statement and its Treatment of the Community's Burden

"The Mosholu Golf Course site construction would result in the least potential for significant impacts. . . ."167

"Does the least impact mean that the mainly poor, low income, minority people of Norwood are less likely to make a public outcry at the prospect of living with the plant than the outcry of citizens from other communities?"168

1. Background of Environmental Justice

President Clinton, acknowledging the profusion of industry in disadvantaged communities, officially recognized environmental justice in an Executive Order.169 This issue has been directly and indirectly raised in the ongoing Croton water filtration conflicts. The community lawsuits, for example, attack the adequacy of the environmental impact statement and its failure to carefully consider the impacts on the community.170 This section of the article will address the impacts on the community from the perspective of the state mandated environmental impact statement as well as President Clinton's Executive Order on environmental justice.

Environmental justice is not a term for a new legal remedy.171 Rather, it encourages and even insists that governmental agencies consider the impact of the proposal on communities that have perhaps been overburdened already.172 Federal courts note this say-

167. CROTON PLANT FIS, supra note 6, at 9.
172. See id. Factors to be considered in analyzing the community's burden include: 1. Whether the neighborhood suffers disproportional adverse health or environmental effects from pollution or environmental hazards; 2. Whether the neighborhood is
ing "Executive Order 12898 [President Clinton's environmental justice Order] specifically states that any agency actions taken pursuant to the provisions of the Order are not subject to judicial review." The President's order, while only imposing a requirement on federal agencies, has heightened the awareness of environmental justice at all levels of government. When the City discusses its "fair share analysis" it is really discussing the doctrine of environmental justice as incorporated in New York City law.

Environmental justice clearly does not concern projects that will merely have a negative impact on a community. It is concerned with communities that are already over-burdened with problems, lacking the resources to stand up for themselves. The filtration plant will certainly have negative impacts. As Congressman Elliot Engel noted in his response to the plant, impacts are directly related to the density of the community that would not exist if the plant was built in the City's northern suburbs.

The impact the construction and operation of the proposed facility will have on the community is a serious concern. The plant will produce 25,000 pounds per day of chemical sludge and use a host of hazardous chemicals in its treatment processes. Noise is also a concern. The EIS has stated that the noise impact will be

affected by under-enforcement of state or federal health or environmental laws; and 3. Whether certain groups have been denied meaningful involvement in governmental decision-making. Past environmental justice cases have concerned putting a highway through a low-income minority neighborhood and the siting of a municipal waste incinerator in an already distressed community. See id.


174. The President's order states:
To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana Islands.


175. See Response to Comments, supra note 82, at 65.

176. "The people know better than anyone that this plant belongs upstate where there is room for it, and where several communities have expressed interest in having it built there." Congressman Elliot Engel as quoted in Jordan Moss, Filtration Battle Goes to Court, NORWOOD NEWS, Oct. 21 - Nov. 3, 1999, at 1. (emphasis added).

177. See Treatment Plant Conceptual Designs, supra note 76, at 2-22.

178. See Croton Special Report, supra note 2.
Yet when the City was constructing a chamber for the water tunnel through the same park, the noise became so bad that the citizens sued. This experience contrasts with the DEP's opinion that the plant will not cause serious impacts.

Congressman Engel summed up the community's feelings about another industrial facility in the community by saying, "The filtration plant is the latest in a long series of sewage-treatment plants, waste-transfer stations and other city facilities being built in The Bronx to make it one of the unhealthiest areas of the country." Furthermore, the Congressman notes that the city has had a propensity to site these facilities in poor neighborhoods, which in New York City means minority neighborhoods. The relevant question, however, is whether the community is overburdened.

2. Fair Share Analysis

New York City has recognized the problem of over-concentration of undesirable facilities in poorer communities by defining "criteria for location of city facilities." These "fair share" requirements are a response to both the perception and reality that minority neighborhoods are unfairly targeted with these facilities. The law therefore requires that the City consider the following in locating undesirable facilities: (a) Whether the facility is compatible with other facilities and programs in the neighborhood; (b) Whether the neighborhood's character will be affected by the facility; (c) Whether the site is cost-effective; and (d) whether the site is compatible with the mayor's location criteria.
The Fair Share requirements are not regulations which govern where a facility will be sited, but rather are criteria to guide the City in choosing locations for municipal facilities.\textsuperscript{187} The local Community Board and the Borough President are also given a voice in the process.\textsuperscript{188} Even if the Bronx Borough President rejects the plan however, the city can still go ahead with the facility.\textsuperscript{189} The requirements are procedures that mandate only a process, not a result. Of the proposal, Borough President Fernando Ferrer said, "This decision further demonstrates the DEP's disregard for the collective will of the people of The Bronx, the quality of life in our communities, and the value of our parks and open space resources."\textsuperscript{190} Analysis of criteria (b) and (c) of the fair share requirements suggests that an alternate site should be chosen. The community's character will be affected negatively, and while it may be the most cost-effective site, there are other social and environmental costs.

i. Cost effectiveness

One of the most serious flaws with the process is its consideration of cost-effectiveness. Because the City owned property will always be cheaper to use than a privately owned site, the process is biased in favor of developing city properties.\textsuperscript{191} New York courts have recognized and faulted the guidelines accordingly.\textsuperscript{192}

\begin{footnotesize}
\begin{enumerate}
\item See 45th Street Block Ass'n v. Giuliani, 630 N.Y.S.2d 526, 527 (1st Dep't 1995). The same lawyer who handled this case, Jack Lester, is handling one of the water filtration lawsuits as well. See also \textit{New York, N.Y., City Charter} § 204(f) (1989), which states, "upon receipt of the statement of needs pursuant to subdivision a of this section, each community board and borough president shall review the statement of needs." \textit{Id.}
\item See William Valletta, \textit{Siting Public Facilities on a Fair Share Basis in New York City}, 25 \textit{Urb. Law.} 1, 7 (1993). "If the borough president does suggest a specific site for a facility proposed in the Statement of Needs, the sponsor agency is required to give it consideration, but may choose to go forward with planning for another site." \textit{Id.} at 7. So when both the Community Board and the Borough President soundly rejected the plant, the City was free to approve the Van Cortlandt Park site anyway.
\item See \textit{id.} "Thus, although it generally will be more 'cost-effective' for the city to locate its facilities on city-owned property, and the acquisition of privately-owned property will almost always involve associated costs, these are not proper considerations for the selection of a site under the fair share analysis." \textit{Id.}
\end{enumerate}
\end{footnotesize}
Since most city owned property is in poor minority neighborhoods they are obviously going to be pre-disposed for selection.¹⁹³

The current process was equally biased because the land chosen was a park, for which the city will pay nothing. In fact city parks would always be tempting choices for municipal facilities. This is why the public trust doctrine was extended to parkland; the land is held by the government in trust for the public.¹⁹⁴ Furthermore New York City's own Zoning Resolution recognizes this cost-effectiveness risk and required removal of land from Department of Parks and Recreation control to be accompanied by a zoning amendment.¹⁹⁵ By calculating the savings in using a park versus buying privately held land in Westchester County and not calculating the decrease in value of disturbed and degraded parkland, the City's Fair Share analysis is flawed. When it was found in the EIS that a Westchester plant costs from $52 to $107 million more to build, was it thereby determined that disturbing twenty-three acres of parkland was worth the savings?¹⁹⁶

ii. Impact on the Community's Character

In saying that the site will have the least potential for significant impacts, the City has failed to consider the long-term effect the plant will have on the neighborhood. The analysis of the socio-economic conditions in the study area, the Norwood section of the Bronx, indicated that no significant adverse impacts would occur.¹⁹⁷ This is a striking conclusion considering that the plant will rise thirty five feet above street level and take several years to construct.¹⁹⁸ The purpose of the fair share criteria is to "foster neighborhood stability and revitalization by furthering the fair distribution among communities of city facilities."¹⁹⁹ Studies have shown that undesirable facilities can actually help create ghettos, as homeless shelters and housing projects did in the South Bronx

¹⁹³. See Rogers, supra note 185, at 214 (1994).
¹⁹⁴. See Miller v. City of New York, 203 N.E.2d at 480.
¹⁹⁶. See Croton Plant FIS, supra note 6, at 51.
¹⁹⁷. See Croton Plant FIS, supra note 6, at 33.
¹⁹⁸. See Croton Plant FIS, supra note 6, at 19.
¹⁹⁹. Silver v. Dinkins, 601 N.Y.S.2d at 369. The city charter reflects these goals when it discusses the need for a fair distribution of undesirable facilities with a regard for the social and economic impacts of them. See New York, N.Y., City Charter § 203 (1989).
in the 1960s. Not only are undesirable facilities found disproportionately in poor neighborhoods like Harlem versus the wealthy Upper East Side of Manhattan, but the facilities themselves contribute to the degeneration of disadvantaged communities. The Norwood has steadily improved in recent years largely as a result of community efforts to fight the spread of urban blight from the South Bronx. The community contrasts with those around it with its graffiti-free environment and surprisingly vivacious business district. Will the large filtration plant really have no impact on this?

New York City's opinion that residential property values would not be affected by the operation or construction of the proposed water treatment plant conflicts with numerous reports. Residents who can afford to move away from oppressive facilities do. Even if the actual operation of the facility is benign the lengthy construction period may not be. Facilities are sited in wealthy neighborhoods the residents have the ability to leave creating a "ring of land deserted by wealthier families" around the undesirable facility.

IV. Site and Filtration Alternatives

The DEP has considered other sites for the Filtration Plant as well as alternatives to filtration in general. This dual track approach does not conflict with the terms of the consent decree in which the City agreed to develop and implement a filtration plan. The court in United States v. City of New York recognized

200. Those who can, the middle class, will move away from such unwanted neighbors. See Camilo Jose Vergara, The New Ghettos, CHRISTIAN SCIENCE MONITOR, Feb. 14, 1991.

201. See Been, supra note 186, at 1011.

202. See CROTON PLANT FIS, supra note 6, at 33. The City's EIS states that there will be no adverse socioeconomic impacts. This opinion is repeated throughout the EIS. See, e.g., CROTON PLANT FIS, supra note 6, at 81.

203. See Rogers, supra note 185, at 200.

204. Been, supra note 186, at 1018. The author of this article suggests that this ring may not occur if the benefits of living in the community outweigh the negative impact of the facility. See Been, supra note 186, at 1018. "The current evidence does not establish that the fair siting of LULUs [locally undesirable land uses] will cause a sufficient decrease in property values to cause this." Been, supra note 186, at 1018. This may not be true, however, in a community like Norwood which straddles the line between the struggling South Bronx and the affluent North Bronx and Westchester County.

205. The City considered sites in the Bronx and nearby Westchester County. See infra notes 195-221 and accompanying text.

the City's commitment to studying non-filtration and found it not to conflict with the consent decree.207 In fact, courts have been open to flexibility in implementing the filtration mandate of the Surface Water Treatment Rule.208 For example the Massachusetts Water Resources Authority was able to delay the EPA's filtration order and prove the merit of its filtration alternatives.209

In choosing alternative sites, technical, environmental, legal, institutional, neighborhood, and economic factors were considered.210 There were three additional Bronx sites and four Westchester County sites considered by the city.211 At each site the city insists there would be negligible impacts.212

A. Site Alternatives

The first Bronx site, Jerome Park Reservoir,213 is still an active alternative despite the fierce community opposition that has rallied against this choice.214 The community's attempts to protect the site by designating it as parkland have failed.215 In fact, when lawsuits were filed in opposition to the Van Cortlandt Park

207. See id.
209. See Jordan Moss, Filter Foes: Boston Ruling Aids Plant Fight, NORWOOD NEWS, May 20-June 2, 1999, at 1. The Massachusetts Federal District Court said, in delaying a filtration order, "This is not to say that the MWRA is thereby automatically relieved of the obligation to filter its water, particularly in light of the presumption expressed by Congress in the SDWA that filtration will almost always be the preferred remedy for a SWTR violation. Thus, the issue is a very narrow one. Will the MWRA's alternative strategy of ozonation, chlorination, and pipe replacement better serve Congress's objective..." United States v. Mass. Water Res. Auth., 48 F. Supp. 2d at 72.
210. See CROTON SPECIAL REPORT, supra note 2, at ES-8.
211. See CROTON PLANT FIS, supra note 6, at 49.
212. For example, at the Mt. Pleasant site in Westchester County the Notice of Completion of the Environmental Impact Statement says, "there would be no significant adverse impacts associated with the proposed project at the Mt. Pleasant Site Alternative..." CROTON PLANT FIS, supra note 6, at 67. Of the other viable suburban site, Greenburgh, the study says, "Residential property values would not be affected by the operation or construction of the proposed WTP since no houses are in immediate proximity to the site alternative." CROTON PLANT FIS, supra note 6, at 81. Similar conclusions are reached throughout the EIS.
213. Jerome Park Reservoir is not an actual park, but rather a city-owned reservoir.
215. See Rebecca Rothbaum, Velella Sits on Hands as Park Bill Dies, RIVERDALE PRESS, Nov. 3, 1999, at 1. Political sparring is a threat to a united community opposition. Senator Velella refused to support a bill in the State Senate to designate the Jerome Reservoir as parkland. He considers this protecting his constituency saying "I'm protecting my district," by keeping alternate sites outside of it available. Id.
site the City's first response was to warn that Jerome Park Reservoir would be the next logical alternative.\textsuperscript{216}

In addition to the Mosholu Golf Course, two other sites in Van Cortlandt Park were considered. The Shandler recreation area had many of the advantages of the Mosholu site, but was more actively used by youth groups.\textsuperscript{217} The Croton Woods location was not chosen because it represents one of the last large stands of old growth forest in the City.\textsuperscript{218}

Siting a filtration plant in Westchester County, a less densely populated suburb above New York City, would mean that the city would pay property taxes to the host community as well as pay to purchase the land.\textsuperscript{219} Unions were vocal in their fear that jobs would go to upstate workers and not city workers and were a major force in keeping the plant in New York City.\textsuperscript{220} However, the Westchester sites are ones that will pose fewer impacts to neighborhoods and people. For example, one of the sites in Westchester is zoned for industrial use.\textsuperscript{221}

\section*{B. Filtration Alternatives}

The Surface Water Treatment Rule designates three classes of systems: 1. filtered; 2. unfiltered but required; and 3. unfiltered, successfully avoiding filtration.\textsuperscript{222} The Croton Water system falls within category two.\textsuperscript{223} The filtration alternatives it

\textsuperscript{216} State Senator Eric Schneiderman, whose district includes the Reservoir, has lobbied to have the Reservoir designated as parkland. See id.

\textsuperscript{217} See Press Release, N.Y. City Dep't of Envtl. Prot., Statement on Croton Filtration Plant Litigation (Oct. 5, 1999) (on file with author). The city immediately sent out a press release warning that the next logical step "would be to site the plant at Jerome Park Reservoir." Id.

\textsuperscript{218} See CROTON PLANT FIS, supra note 6, at 111.

\textsuperscript{219} See CROTON PLANT FIS, supra note 6, at 51.

\textsuperscript{220} See CROTON PLANT FIS, supra note 6, at 51. Eight to fifteen million dollars a year in property taxes would be saved by keeping the project out of Westchester. See CROTON PLANT FIS, supra note 6.

\textsuperscript{221} For example, City contractors lobbied at the City Planning Board meeting on April 7, 1999 to consider the loss of jobs that rejecting City sites would cause. Frank McArdle, head of the General Contractors Association and a former DEP commissioner, said the Van Cortlandt site was the best of all choices. See Jordan Moss, Commission Grills DEP on Plant, NORWOOD NEWS, April 22-May 5, 1999, at 1.


\textsuperscript{223} Surface Water Treatment Rule, 40 C.F.R. § 141.70(a)(1) (1999).

\textsuperscript{224} New York City's Croton System has a "Failure to Filter" violation from the state. See N.Y. STATE DEP'T OF HEALTH, Appendix F. Listing of PWS with Failure to Filter Violation, Violation Number 7003666, http://www.health.state.ny.us/nysdoh/bpwp/appendf.htm (last modified July 1999).
considers must satisfy several criteria to be successful. Below is a summary of the non-filtration options that exist. Any plan for a non-filtration solution to the Croton Water problem would likely use a combination of these methods.\textsuperscript{224}

1. Natural alternatives

Natural alternatives include creation of 300 acres of “engineered wetlands.”\textsuperscript{225} This would reduce phosphorous naturally, filtering the run-off.\textsuperscript{226} Constraints include the excessive cost of acquiring land in expensive Westchester County.\textsuperscript{227}

2. Engineered alternatives:

Hypolimnetic Aeration would introduce oxygen to treat anoxic conditions at the deepest depths of the reservoirs.\textsuperscript{228} Increased oxygen levels would reduce the release of heavy metals into the water.\textsuperscript{229} Release of “metals like iron” cause discoloration of the drinking water.\textsuperscript{230}

There are sixty seven water treatment plants in the Croton Watershed that, after treatment, discharge directly into the watershed.\textsuperscript{231} By upgrading the waste water treatment plants the City can reduce the phosphorous loading into the reservoirs.\textsuperscript{232} It is this phosphorous loading that fuels the plant and algal blooms in the water system.\textsuperscript{233}

Finally, microscreening could be used to remove insect larvae from the water.\textsuperscript{234} This has been a concern since the 1960s.\textsuperscript{235} Larvae in the water leads to consumer complaints and is considered an aesthetic water quality problem.

\textsuperscript{224} See, e.g., CROTON SPECIAL REPORT, supra note 2, at 2-18. For example, one combination proposed: “. . . Plan 7, which includes both hypolimnetic aeration and continuous alum addition, as well as microscreening for larvae removal. . . .” CROTON SPECIAL REPORT, supra note 2, at 2-18.

\textsuperscript{225} CROTON SPECIAL REPORT, supra note 2, at 2-18 at 2-10.

\textsuperscript{226} CROTON SPECIAL REPORT, supra note 2, at 2-18.

\textsuperscript{227} See supra notes 14-15 and accompanying text, discussing the prohibitive cost of large scale land acquisition in Westchester County.

\textsuperscript{228} See CROTON SPECIAL REPORT, supra note 2, at 2-9.

\textsuperscript{229} See CROTON SPECIAL REPORT, supra note 2, at 2-9.

\textsuperscript{230} See CROTON SPECIAL REPORT, supra note 2, at 2-9.

\textsuperscript{231} See CROTON SPECIAL REPORT, supra note 2, at 2-9.

\textsuperscript{232} See CROTON SPECIAL REPORT, supra note 2, at 2-9.

\textsuperscript{233} See CROTON SPECIAL REPORT, supra note 2, at 2-9.

\textsuperscript{234} See CROTON SPECIAL REPORT, supra note 2, at 2-9. The drinking water has experienced periodic episodes of insect larvae infestation.

\textsuperscript{235} See CROTON SPECIAL REPORT, supra note 2, at 2-9.
3. Chemical Alternatives

Chlorine is the traditional disinfectant used in municipal water supplies.\textsuperscript{236} There is growing concern, however, that the chemical is contributing to bladder and rectal cancer.\textsuperscript{237} Alternatives are being actively sought.

Ozone is supported by the EPA as an alternative disinfectant.\textsuperscript{238} However, when it kills bacteria and the dead cells are sent along with the disinfected water, the dead bacteria serve as food for more growth.\textsuperscript{239} Hence filtration is an optimal component of any ozone filtration system.

Two other chemicals that can be added at the source water to control localized problems include alum and copper sulfate. Copper sulfate is used as needed to control algal blooms.\textsuperscript{240} Alum is used to coagulate dissolved solids, which then settle on the reservoir floor.\textsuperscript{241} This chemical could aid in attaining the EPA and State color standards.\textsuperscript{242} With the Croton Watershed under increasing development pressures, however, chemicals may prove insufficient to maintain the water's quality.

4. Discontinuance of the Croton System

As stated previously the Croton System is essential in droughts.\textsuperscript{243} The Chelsea Pumping State upstate can pump Hudson River water into the system.\textsuperscript{244} But this water requires extra

\textsuperscript{236} See Tarlock, supra note 66, at 257.
\textsuperscript{237} See Sarah J. Meyland, Land Use & The Protection of Drinking Water Supplies, 10 PACE ENVTL. L. REV. 563, 578 (1993). Chlorine is increasingly linked to cancer. The federal government is responding to this concern and has promulgated the Disinfection By-Products Rule, aimed at curbing the over-use of disinfectants like chlorine. See id. at 577.
\textsuperscript{238} See Kavanaugh, supra note 66, at 839.
\textsuperscript{239} See Kavanaugh, supra note 66, at 839-840. The EPA argues that ozonation must be accompanied by filtration. See Kavanaugh, supra note 66, at 840.
\textsuperscript{240} See Croton Special Report, supra note 2, at 2-11. Copper sulfate could reduce taste and odor by killing algal overgrowth. This could reduce the amount of chlorine that needs to be added to the water as well. See Croton Special Report, supra note 2, at 2-11.
\textsuperscript{241} See Croton Special Report, supra note 2, at 2-10. Alum coagulates organic material and thereby reduces color. See Croton Special Report, supra note 2, at 2-11.
\textsuperscript{242} See Croton Special Report, supra note 2, at 2-11.
\textsuperscript{243} See supra notes 43-46, discussing the necessity of the Croton System in times of drought.
\textsuperscript{244} For a discussion of the problems of using river water see Timothy B. Wheeler & Dan Trianh Dang, Tapping a Rare Source; River, THE BALTIMORE SUN, Aug. 8, 1999, at 1B. During the drought of the summer of 1999, the City of Baltimore was forced to tap the Susquehanna River. See id.
treatment to be potable. Its comparative filth, when added to comparatively clean Catskill and Delaware water, led the Hudson River Fishermen’s Association to file a suit to enjoin the city’s use of this water. They contended that putting Hudson River water into Westchester County reservoirs to replenish them was actually pollution in itself, putting unhealthful loads of filth and chemicals into the water bodies. The Croton System is therefore a critical part of the City’s water system.

V. Conclusion

Regardless of whether the Croton Water Filtration plant is sited in Van Cortlandt Park in the Bronx, the process for choosing the location has been flawed. New York City must seek legislative approval to alienate the parkland. It must amend its Zoning Resolution to permit the loss of parkland. Finally, it needs to revise its Environmental Impact Statement to better reflect the real impact the plant will have on the North Bronx. Rather than summarily dismissing the plant’s impacts, the City should have given meaningful consideration to the importance of maintaining the park’s integrity. Furthermore, the isolated locations in Westchester County, unlike the Bronx location, are truly remote from human inhabitants and should be given more consideration. They are privately-owned commercial/industrial sites that are better suited to this undesirable facility. The added cost of building the plant there may be worth the cost of saving twenty three acres of valuable parkland in the densely populated North Bronx.

245. See Hudson River Fishermen’s Association v. City of New York, 751 F. Supp. 1088 (S.D.N.Y. 1990). The court found the “quality of the Hudson River water is usually inferior to that of the Croton System.” Id. at 1094.

246. See id. at 1099.

247. As of the publication of this comment, the New York Court of Appeals has effectively halted the construction of the filtration plant in Van Cortlandt Park. The United States Court of Appeals for the Second Circuit certified the question of alienation to the New York court. In its decision, the New York court found that an unapproved alienation of parkland was taking place. See Friends of Van Cortlandt Park v. City of New York, 2001 WL 113836 (N.Y.).